

Scr. No. 09/817,322

PATENT
01P04776US**Claims**

1. (Currently Amended) A system for use in a first application concurrently operating together with a plurality of network compatible applications, comprising:

an entitlement processor for enabling user access to a first application of a plurality of concurrently operating applications in response to validation of user identification information; and

a communication processor employed by said first application of said plurality of concurrently operating applications for intermittently communicating an activity indication to a managing application within a timeout window, said activity indication being generated in response to user action and being communicated sufficiently often to prevent an inactivity timeout of said first application being initiated during normal operation of said first application by said managing application in response to said timeout window being exceeded.

2. (Previously Presented) A system according to claim 1, wherein said intermittently communicated activity indication prevents an inactivity timeout of said plurality of concurrently operating applications of a particular user initiated session.

3. (Original) A system according to claim 1, wherein said communication processor stores a plurality of activity indications and sends said plurality of activity indications as a batch to said managing application.

4. (Currently Amended) A system according to claim 3 1, wherein ~~said communication processor intermittently communicates said activity indication to said managing application in response to a user action~~
said normal operation comprises application operation exclusive of abnormal operation comprising an application failure condition and
said user action comprises at least one of, (a) keyboard activity, (b) mouse activity, (c) other data entry device activity; and (d) another user initiated PC application operation activity.

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5. (Previously Presented) A system according to claim 1, wherein said first application and said managing application reside in the same PC and

said activity indication notifies said managing application of activity by said first application and includes one or more of, (a) a session identifier for identifying a particular user initiated session, (b) a URL to be contacted if said activity notification is not successful, (c) an identification of a type of event preventing said activity notification from being successful.

6. (Original) A system according to claim 1, wherein said communication processor intermittently communicates activity indications to said managing application using a plurality of different commands including an activity notification command and a command involving at least one of, (a) determining a user operation session identifier from said managing application and (b) sending a URL to said managing application.

7. (Original) A system according to claim 1, wherein said communication processor communicates to said managing application a request to receive an activity indication associated with said first application and maintained by said managing application, said activity indication indicating time since the last activity update.

8. (Previously Presented) A system according to claim 1, wherein individual applications of said plurality of concurrently operating applications independently intermittently communicate an activity indication to said managing application and

said communication processor communicates with a browser application providing a user interface display permitting user entry of identification information for validation by said entitlement processor.

9. (Original) A system according to claim 1, wherein said communication processor communicates a time-out threshold value comprising said timeout window to said managing application.

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10. (Currently Amended) A system for use by a managing application supporting concurrent operation of a plurality of Internet compatible applications, comprising:

an input processor for intermittently receiving activity indications from a plurality of concurrently operating applications, an individual activity indication being generated in response to user action;

an activity monitor for updating individual activity status indicators, corresponding to said plurality of concurrently operating applications, in response to said received activity indications;

a comparator for comparing individual activity status indicators with corresponding time-out threshold values to identify an application time-out event indicated by a status indicator exceeding said time-out threshold and occurring during normal operation of an application; and

a communication processor for communicating notice of said application time-out event to one of said plurality of concurrently operating applications.

11. (Previously Presented) A system according to claim 10, wherein said activity indications received by said input processor are provided in response to a user action and

said user action comprises at least one of, (a) keyboard activity, (b) mouse activity, (c) other data entry device activity, and (d) another user initiated PC application operation activity.

12. (Original) A system according to claim 10, wherein an activity status indicator comprises a time indication identifying when activity of a particular application was last reported, and

said time-out threshold comprises a predetermined time duration and said managing application determines said particular application to be inactive if said time indication exceeds said time-out threshold.

13. (Original) A system according to claim 10, wherein said input processor receives activity indications from a plurality of different commands including an activity notification command and a command involving at least one of, (a) determining a user operation session identifier from said managing application and (b) sending a URL to said managing application.

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14. (Original) A system according to claim 10, wherein
said communication processor communicates notice of said application
time-out event to applications of said plurality of concurrently operating applications
that have previously requested a notification of session termination.

15. (Original) A system according to claim 10, wherein
said communication processor communicates notice of said application
time-out event in response to at least one condition of, (a) a received command
requesting notification and (b) a received communication from an application session
having previously produced a time-out event and (c) automatically upon generation of
said time-out event.

16. (Original) A system according to claim 10, wherein
said activity indication includes one or more of, (a) an identification of
a particular user initiated session, (b) a URL to be contacted if said activity
notification is not successful, (c) an identification of a type of event preventing said
activity notification from being successful.

17. (Original) A system according to claim 10, wherein
said corresponding time-out threshold values comprise a common
timeout period for said plurality of concurrently operating applications.

18. (Original) A system according to claim 10, wherein
said comparator uses a predetermined default value for said time-out
threshold values.

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19. (Currently Amended) A system supporting concurrent operation of a plurality of Internet compatible applications, comprising:

a browser application providing a user interface display permitting user entry of identification information and commands for a plurality of Internet compatible applications; and

a managing application for receiving activity indications from a plurality of concurrently operating applications, an individual activity indication being generated in response to user action, said plurality of concurrently operating applications being initiated by user commands via said browser user interface, said received activity indications being provided by individual applications sufficiently frequently to prevent an inactivity timeout of said individual applications and during normal operation of an individual application.

20. (Original) A system according to claim 19, wherein

said activity indication notification includes one or more of, (a) an identification of a particular user initiated session, (b) a URL to be contacted if said activity notification is not successful, (c) an identification of a type of event preventing said activity notification from being successful.

21. (Original) A system according to claim 19, wherein

a common timeout period is used as said inactivity timeout for said plurality of concurrently operating applications.

22. (Currently Amended) In a system supporting concurrent operation of a plurality of network compatible applications, a method comprising the activities of:

intermittently receiving activity indications from a plurality of concurrently operating applications, an individual activity indication being generated in response to user action;

updating individual activity status indicators, corresponding to said plurality of concurrently operating applications, in response to said received activity indications;

comparing individual activity status indicators with corresponding time-out threshold values to identify an application time-out event indicated by a status indicator exceeding said time-out threshold and occurring during normal operation of an application; and

communicating notice of said application time-out event to one of said plurality of concurrently operating applications.

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23. (Currently Amended) A method employed by a first application operating in a system supporting concurrent operation of a plurality of network compatible applications, said method comprising the activities of:

enabling user access to a first application of a plurality of concurrently operating applications in response to validation of user identification information; and

supporting intermittent communication by said first application of an activity indication to a managing application within a timeout window, said activity indication notification being generated in response to user action and being communicated sufficiently often to prevent an inactivity timeout of said first application being initiated during normal operation of said first application by said managing application in response to said timeout window being exceeded.

24. (Currently Amended) In a system supporting concurrent operation of a plurality of network compatible applications, a method comprising the activities of:

intermittently receiving activity indications from a plurality of concurrently operating applications of a particular operating session of a user, an individual activity indication being generated in response to user action;

updating a single activity status indicator associated with said plurality of concurrently operating applications of said particular operating session, in response to said received activity indications;

comparing said single activity status indicator with a time-out threshold value to identify a time-out event indicated by a status indicator exceeding said time-out threshold and occurring during normal operation of an application; and

re-initializing said plurality of concurrently operating applications in response to said comparison.